

ANDREYEVA, N.N.

The NMS-2 photopyranometer. Trudy ANII 217:175-179 '59.
(Pyranometer) (MIRA 13:2)

ANDREYEVA, N.N.

Results of investigating the sensitivity of balance meters
and pyrogeometers. Trudy AANIY 229:147-166 '61.

(Actinometer)

(MIRA 14:8)

DVOSKINA, G.I.; ~~ANDREYEVA~~, N.N.; SYCHEV, K.A., red.; ANDREYEVA, T.P., red.;
KOTLYAKOVA, O.I., tekhn.red.

[Materials from observations at drifting research stations North Pole-6 and North Pole-7 in 1958-1959] Materialy nabludeni nauchno-issledovatel'skikh dreifuiushchikh stantsii "Severnyi polius-6," "Severnyi polius-7" 1958/59 goda Leningrad, Izd-vo "Morskoi transport," 1963. 709 p. Leningrad. Arkticheskii i antarkticheskii nauchno-issledovatel'skii institut. Trudy, vol.251). (MIRA 16:5)
(Arctic regions--Meteorology--Observations)
(Arctic regions--Actinometry--Observations)

L 11993-66

ACC NR: AP6000771

SOURCE CODE: UR/0246/65/065/009/1392/1397

AUTHOR: Andreyeva, N. N.

ORG: Epilepsy Clinic and Laboratory of Electro-physiology of the Scientific Research Institute of Psychiatry of the Ministry of Health RSFSR, Moscow (Klinika epilepsii i laboratoriya elektrofiziologii Nauchno-issledovatel'skogo instituta psikiatrii Ministerstva zdoravookhraneniya RSFSR)

TITLE: The therapeutic effectiveness of benzonal and its mode of action

SOURCE: Zhurnal nevropatologii i psikiatrii, v. 65, no. 9, 1965, 1392-1397

TOPIC TAGS: nervous system drug, clinical medicine, experiment animal, EEG, drug effect

ABSTRACT: A clinical trial of this recently synthesized medication was conducted in 1960 in 95 ambulatory or hospitalized epileptics for 6 months to 2-3 years. In 78 cases repeated EEG's were taken prior to and during the trial to determine the dynamics of the effect of single doses (0.1-0.4 g) and protracted treatment. Unipolar and bipolar derivations were used, and in some cases base-radial derivations. No toxic

Card 1/2

UDC: 616.853-085.786+615.786-06:616.8

L 11993-66

ACC NR: AP6000771

city was observed. The drug had 1/2 the effect of luminal. During the dynamic clinical study optimal daily doses were determined: these were 0.05-0.2 g for children and 0.1-0.3 g for adults (to be increased to up to 1.2 g), and were higher than those recommended in an earlier trial. Benzonal seemed to act mainly on the cortex of the cerebral hemispheres. In patients with two apparent foci (cortical and sub-cortical) another medication with preferred subcortical effect (dilantin, chloracon, phenacon) had to be added. Best effect was seen on convulsions with cortical involvement of varying origin. Not only generalized but also focal and Jacksonian convulsions responded. This was reflected in the EEG. The importance of a dynamic EEG study is stressed; a combination of clinical and laboratory data permits more specific medical treatment with better results. Orig. art. has: 2 figures.

SUB CODE: 06, 07/ SUBM DATE: 30Sep64/ ORIG REF: 010/ OTH REF: 000

H-0
Cord 2/2

ACC NAM 000000000

(77)

SEARCHED: 00/0110/00/000/0000/0000

AUTHOR: Andreyeva, N. N.; Kokoulin, V. I.

ORG: none

TITLE: Actinometric observations in the Arctic Seas during the International Geophysical Year (1957-59)

SOURCE: Leningrad. Arkticheskiy i antarkkticheskiy nauchno-issledovatel'skiy institut. Trudy, v. 269, 1966. Okeanograficheskkiye i gidrometeorologicheskkiye issledovaniya Arkticheskikh morey (Oceanographic and hydrometeorological studies of Arctic Seas), 79-95

TOPIC TAGS: actinometry, solar radiation, optic albedo

ABSTRACT: The author surveys actinometric data collected during the International Geophysical Year and supplemented by occasional observations since 1940. The new data differ somewhat from the older due partly to the lack of standardization of observations. For example, actinometrist S. N. Makarov found that the albedo of the sun measured from the ship's bow is twice that measured amidships where the reflection due to the ship's white paint is greater. Much remains to be done in this respect. Heat imparted by solar radiation to the surface of the sea varies with the sun's altitude above the horizon and with the transparency of the atmosphere. The relationship between ra-

Card 1/2

ANDREVA, N. P.

Garin, Ia. A., Danilina, M. I. and Andreva, N. P., Investigation in the field of catalytic transformation of alcohols into hydrocarbons of the living series. III. Obtaining hexadiene-2,4 from a mixture of ethyl alcohol and methyl-ethylketone. p. 1069

It is shown that under the conditions described, the addition of methyl-ethylketone to alcohol produces the formation of 2-ethyl and ethyl hydrocarbons with 6 carbon atoms.

The Lebedev All Union Sci. Res. Inst.
April 9, 1947

SV: Journal of General Chemistry (USSR) 18 (80) No. 6 (1948)

Andreyeva, N. P., Photopyranometer NMS-2, Tr. Arkt. n.-i. in-ta (Works of the Arctic Scientific Research Institute), No 217, 1959, p 175-179; (RZhGeofiz 8/59-7746)

ANDREYEVA, N.S.; VOYNIK, A.I.; RAYSH, V.G.; TANCHER, N.I.; SHEVCHENKO, M.N.

Oxygen therapy by inhalation and subcutaneous injection. Vrach, delo
no.8:863. Ag '57. (MLRA 10:8)

1. Penzenskaya gorodskaya bol'nitsa im. N.A.Semashko
(OXYGEN--THERAPEUTIC USE)

ANDREYEVA, N. S.: Master Geolog-Mineralog Sci (diss) -- "The lithology of the
basic genetic types of Quaternary deposits of Voronezh Oblast". Voronezh, 1958.
8 pp (Voronezh State U), 120 copies (KL, No 9, 1959, 113)

ANDREYEVA, N. S. (Moskva)

Structure of globular proteins based on X-ray structural
crystallography data. Usp. sov. biol. 58 no. 1:3-21
Jl-Ag '64. (MIRA 17:12)

ANDREYEVA, N. S.

Physical Chemistry

Dissertation: "Ro^oentgenographic Investigation of Certain Fiber Proteins." Cand Phys-Math Sci, Moscow State U, Moscow, 1954. (Refretivnyy Zhurnal--Khimiya, Moscow, No 3, Feb 54)

SO: SUM 213, 20 Sept 1954

ATIMETIEVA, H. B.

"X-Ray Analysis of Antibiotics"
Antibiotiki, No 3, 1954, 3-11

This is a review of the X-ray analyses of the following antibiotics:
benzyl penicillin salts, chloramycetin, terramycin, aureomycin, and gram-
icidin. Bibliography contains 12 references. (RZhKhim, No 3, 1955)

SO: Sum-No 845, 7 Mar 56

USSR/Physics - Single-crystals of aluminum

FD-1082

Card 1/1 Pub. 153 - 18/24

Author : Andreyeva, N. S., and Bezirganyan, P. A.

Title : Production of large aluminum single-crystals of a given orientation

Periodical : Zhur. tekhn. fiz., 24, No 10, 1876-1878, Oct 1954

Abstract : The authors describe their technique for producing large (up to 20 cm) single-crystals of aluminum having a given orientation of the crystal axis. They explain basic conditions necessary to maintain in order to obtain such large crystals.

Institution : -

Submitted : November 21, 1953

USSR/ Chemistry - Silk fibers

Card 1/1 Pub. 22 - 28/63

Authors : Andreyeva, N. S., and Iveronova, V. I.

Title : The structure of silk fibroin

Periodical : Dok. AN SSSR 99/6, 991-993, Dec 21, 1954

Abstract : Experiments were conducted with fibers of Bombyx mori silk fibroin treated in a buffer solution of $\text{NaHCO}_3 + \text{Na}_2\text{CO}_3$ at 9.9 pH to determine the structure of the fibroin. Photos were made of the non-monochromatized and monochromatized copper emission obtained during the reflection of x-rays from a curved aluminum monocrystal placed in an RKU-86 type camera. The results obtained are listed. Five references: 3-USA; 1-USSR and 1-German (1943-1954). Tables; illustrations.

Institution: The M. V. Lomonosov State University, Moscow

Presented by: Academician N. V. Byelov, May 11, 1954

ANDREYEVA, N. S.

USSR/Chemistry - Physical chemistry

Card 1/1 Pub. 22 - 29/51

Authors : Andreyeva, N. S., and Iveronova, V. I.

Title : The structural characteristics of fibrillar albumina

Periodical : Dok. AN SSSR. 101/1, 111-114, Mar 1, 1955

Abstract : The basic problems involved in the study of the structural characteristics of fibrillar albumina are analyzed. X-ray experimental data are presented showing that the fibers of certain fibrillar albumina have parallel oriented chain molecules the packing of which has a certain specific nature. The presence of various interference types indicates that fibrillar albumina represent systems consisting of several phases. Five references: 4 USSR and 1 USA (1936-1952). Illustrations.

Institution : The M. V. Lomonosov State University, Moscow

Presented by : Academician N. V. Byelov, September 21, 1954

ANDREYEVA, N. S., Moscow State University

"On Certain Peculiarities of the Structure of Fibrous Proteins and Oriented Polymers," a paper submitted at the International Symposium on Macromolecular Chemistry, 9-15 Sep 1957, Prague.

Andreyeva, N. S.

ANDREYEVA, N.S.; IVERONOVA, V.I.

Characteristics of the X-ray diffraction patterns of oriented high-molecular substances [with summary in English]. Biofizika 2 no.3: 281-293 '57. (MLRA 10:8)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V.Lomonosova (for Andreyeva). 2. Institut biofiziki Akademii nauk SSSR, Moskva (for Iveronova)
(X RAYS) (DIFFRACTION) (MOLECULES)

USSR/General Biology. Physical and Chemical Biology.

B-1

Abs Jour: Ref Zhur-Biol., No 20, 1958, 90257.

Author : Millionova, M.I., Andreyeva, N.S.

Inst :

Title : The Structure of the Molecular Chain of Collagen.

Orig Pub: Biofizika, 1957, 2, No 3, 294-303 (res. Eng.)

Abstract: The authors report a method of analyzing X-ray diffraction images of various proteins belonging to the collagen (I) type. Having established the relationship of the peculiarities of these images to the amino acid composition of the proteins under study, they reach the conclusion that the reason for the unique form of coagulation of polypeptide chains in some parts of the long molecule (I) which was established by the authors earlier, is the accumulation in those areas of residues of amino

Card : 1/2

Card : 2/2

Andreyeva, N.S.

70-4-4/16.

AUTHORS: Andreyeva, N.S., Yesipova, N.G. and Millionova, M.I.

TITLE: On Peculiarities in the Structure of Collagen. (Ob osobennostyakh stroeniya kollagena).

PERIODICAL: Kristallografiya, 1957, Vol.2, Nr 4, pp.470-474 (USSR).

ABSTRACT: Outline account - fuller details in "Biofizika", Vol.2, Nos. 3, 4 and 5 (1957). The dependence of the quantity of ordered phase in different collagens on various factors was investigated to elucidate the principles conditioning the presence of specific chain configurations in separate parts of the molecules in the protein groups of collagen. A major factor was found to be the accumulation of iminoacids and glycine in separate parts of the molecular chain. Other aminoacids may be present to a smaller extent. Water stabilises the particular chain configuration being distributed in the ordered parts near the chain skeletons (3 Å away) and linked by H bonds. Photographs were taken with Cu radiation monochromatised by reflection from pentaerithritol and the peak heights and integrated intensities of the rings at 2.9 and 11.5 Å were measured. Specimens used were collagen RTT, procollagen prepared by Orekhovich's method, collagen from pike skin, collagen from cod skin and spongin. These were examined in the disordered state and photographs were also

Card 1/2

MILLIONOVA, M.I., ANDREYEVA, N.S.

Configuration model of the glycyl-l-proline chain. Biofizika
3 no.3:259-264 '58 (MIRA 11:6)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta
im. M.V. Lomonosova (for Millionova). 2. Institut biologicheskoy
fiziki AN SSSR, Moskva (for Andreyeva).

(COLLAGEN)

(GLYCINE)

(PROLINE)

AUTHORS: Andreyeva, N. S., Iveronova, V. I., 62-58-3-27/30
~~Kosarenko, T. D.~~, Poroshin, K. T.,
Shibnev, V. A., Shutskever, N. Ye.

TITLE: Investigation of the Structure of Peptides Containing
Glycine and l-Proline (Issledovaniye struktury peptidov,
soderzhashohikh glitsin i l-prolin)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh
Nauk, 1958, Nr 3, pp. 376-377 (USSR)

ABSTRACT: The investigation of peptides containing amino acids is
of importance for the investigations of the structure of
proteins. The stereochemical rôle of pyrrolidine rings
within the configuration of the polypeptide chain has not
yet been sufficiently explained. In general it is assumed
that the bends of the polypeptide chains are formed in such
points, where residues of proline and oxyproline are present.
At present structural investigations of the peptides and
polypeptides of numerous amino acids are carried out.
There have, however, only few works been published on the
investigation of compounds containing amino acids. The
aim of this work is the investigation of the above mentioned

Card 1/2

Investigation of the Structure of Peptides Containing Glycine and 1-Proline 62-58-3-27/30

structure of peptides. Glycyl-1-prolyl, 1-prolylglycine, carbobenzoxyglycyl-1-prolyl and the anhydride of glycyl-1-proline were synthesized. Furthermore the first stage of the x-ray analysis of the synthesized compounds was finished.

There are 1 table and 10 references, 1 of which is Soviet.

ASSOCIATION: Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta i Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR
(Physics Department of Moscow State University and the Institute for Organic Chemistry imeni N. D. Zelinskiy, AS USSR)

SUBMITTED: October 31, 1957

Card 2/2

YESIPOVA, N.G., ANDREYEVA, N.S., GATOVSKAYA, T.V.

Role of water in the structure of collagen [with summary in English].
Biofizika 3 no.5:529-540 '58 (MIRA 11:10).

1. Fiziko-khimicheskiy institut im. Karpova, Moskva, i Fizicheskiy
fakul'tet Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova:
(COLLAGEN,
water in cytol. collagen structure, x-ray diffraction
(Rus))
(WATER,
in collagen cytostructure, x-ray diffraction (Rus))

ANDREYEVA, N. S.

"New classification of the kinds of polypeptide chains according to structure"

with M. I. Millionova "Model of polymer glycyl-L-proline"

report presented at the 10th All-Union Conf. on Highly Molecular Compounds,
Biologically Active Polymer Compounds, Moscow, 11-13 June 1958. (Vest.Ak
Nauk SSSR, 1958, No. 9, pp. 111-113)

ANDREYEVA, A. S.

НИКОЛОВА, М. И.; АНДРЕЕВА, А. С.

"On the Configuration of Polypeptide Chains in Collagen"

a report presented at Symposium of the International Union of
Crystallography Leningrad, 21-27 May 1959

ANDRUSHEVA, N.S.

Relation between the configuration of fibrillous proteins on
their chemical structure. Vysokom.sped. 1 no.2:308-314
F '59. (MIRA 12:10)

(Proteins)

USTINOVA, A.V.; ANDREYEVA, N.S.

X-ray diffraction study of the effect of temperature on the
structure of polyamide fibers. Vysokom.sped. 2 no.6:958-959 Je
'60. (MIRA 13:6)
(Polyamides--Spectra)

YESIPOVA, N.G.; LI PAN-TUN [Li P'ang-t'ung]; ANDREYEVA, N.S.; KOZLOV,
P.V.

Investigation of the spherulite structure of polymers. Part 4:
X-ray study of macrospherulites of polyethylene sebacate. Vysokom.
soed. 2 no.7:1109-1118 J1 '60. (MIRA 13:8)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Sebacic acid) (Spherulites--Spectra)

ANDREYEVA, N. S., VIZINA, A. A., and LEMAZHKHIN, B. K. (USSR)

"The Employment of Narrow-Angle X-Ray Dispersion method for
Examination of Protein Solutions."

Report presented at the 5th International Biochemistry Congress,
Moscow, 10-16 Aug 1961

ANDREYEVA, N. S., MILLIONOVA, M. I., and CHIRCADZE, I. N. (USSR)

"Structural Investigation of Collagen Synthetic Model."

Report presented at the 5th International Biochemistry Congress,
Moscow, 10-16 Aug 1961

15-8520

26300

S/190/61/003/008/013/019

B110/B208

AUTHORS: Li Li-sheng, Andreyeva, N. S., Kargin, V. A.

TITLE: X-ray examination of polyethylene monocrystals at different temperatures

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 8, 1961.
1238 - 1242

TEXT: The particularities of elastic vibrations of crystal lattices of isolated polyethylene (PE) crystals could be clarified by measuring the thermal expansion coefficients of the three parameters of the rhombic unit cell of PE which consists of several monocrystals. The purpose of the present paper was the determination of the thermal expansion coefficients of PE monocrystals in the temperature range from -50 to +135°C. PE monocrystals were obtained from 0.01% solution in xylene, by heating at 140°C, and cooling down to room temperature for three weeks. X-ray pictures were taken by means of PKB-400 (RKVT-400) chamber. Temperature was kept constant and recorded by thermocouples connected in series and by an ЭПД-17 (EPD-17) electron potentiometer. Cu K_α rays obtained by Ni filter were used. The Debye crystallograms were taken and the cell parameters a and Card 1/4

26300

S/190/61/003/008/013/019

B110/B208

X-ray examination of...

b determined. The parameter along the c-axis could not be determined since the (002) reflex was masked by a group of lines. The spread of a on the basis of the (200) line was $\pm 0.02 \text{ \AA}$, on the basis of the (400) line, $\pm 0.01 \text{ \AA}$. The parameters b were determined from the (020) line, maximum error $\pm 0.01 \text{ \AA}$. Results were well reproducible. They are as follows:

T °C	18.5	40	50	70	75	97	100.5	105	110	115	119
a (Å)	7.40	7.43	7.45	7.50	7.51	7.55	7.58	7.64	7.70	7.72	7.75

b (Å) 4.94

The linear expansion coefficient α_b in the range 18.5 - 119°C is zero.

The following was found for α_a ; between 18.5 - 97°C: $\alpha_a = 2.6 \cdot 10^{-2} \%/^{\circ}\text{C}$ X
 $\pm 0.8 \cdot 10^{-2} \%/^{\circ}\text{C}$; between 97 - 120°C: $\alpha_a = 1.2 \cdot 10^{-1} \%/^{\circ}\text{C}$. The curves

$a = f(T)$ and $b = f(T)$ in the low-temperature range were recorded by cooling the samples in liquid N_2 . This was performed by a closed PKB-86 (RKV-86) chamber. The following λ values were found: $T = 18.5^{\circ}\text{C}$; $a = 7.40$; $b = 4.94$. $T = -47^{\circ}\text{C}$; $a = 7.22$; $b = 4.86$. In the temperature range of -47°C to 18.5°C , $\alpha_a = 3.6 \cdot 10^{-2} \%/^{\circ}\text{C} \pm 0.9 \cdot 10^{-2} \%/^{\circ}\text{C}$; $\alpha_b = 2.4 \cdot 10^{-2} \%/^{\circ}\text{C} \pm 0.7 \cdot 10^{-2} \%/^{\circ}\text{C}$.

The root mean square deviation of the lattice points of

Card 2/4

~~26326300~~

S/190/61/003/008/013/019

B110/B208

X-ray examination of...

the PE cell was estimated for the lines (200) and (400) with temperature fluctuations. A temperature dependence of the integral intensity of the

Debye line was assumed corresponding to: $\exp(-2ku_g^2 \sin^2 \theta / \lambda^2)$, where k is

a constant, u_g^2 the root mean square deviation at the temperature T . The following was found:

$T^\circ\text{C}$	$\sin \theta_{200}$	$\sin \theta_{400}$	I_{200}	I_{400}
-47 (T_2)	0.2130	0.4271	71	11.9
18.5 (T_1)	0.2079	0.4078	73.8	7.55

The root mean square deviation of the lattice points was 0.06 \AA^2 between 18.5 and -47.5°C 0.06 \AA^2 . The data obtained were in good agreement with those obtained by D. R. Holmes, C. W. Bunn, and W. P. Slichter. The divergent data obtained by T. H. Wakelin et al. are explained by the fact that they are mean values for wide temperature ranges. The different character of the change of α_a and α_b is explained by the fact that the

Card 3/4

26301 26390

S/190/61/003/008/013/019
B110/B208

X-ray examination of...

rotary motions are not yet effective at low temperatures (A. I. Kitaygorodskiy, Organicheskaya kristalloghimiya, 1955). On the basis of papers by A. Keller on the laminated structure of monocrystals the authors assume: (1) at 100°C, an intermediate stage of decomposition begins: decomposition into bands; (2) decomposition takes place step by step, and is completed at the melting point (135°C). The intense increase of the one cell parameter is caused by the secondary structure of crystals. Keller's assumption saying that the bands are located in the (110) plane are not confirmed by the authors' experimental data and by the sliding of bands along (010). The bands lie in the (100) plane. There are 3 figures and 15 references: 3 Soviet-bloc and 12 non-Soviet-bloc. The three most recent references to English-language publications read as follows: Ref. 3: D. R. Holmes, J. Polymer Sci., 42, 237, 1960; Ref. 4: T. H. Wakelin, A. Sutherland; R. L. Beck, J. Polym. Sci., 42, 278, 1960; Ref. 13: A. Keller, O' Connor, Disc. Faraday Soc., 1958, N 25, 114. X

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: December 2, 1960

Card 4/4

ANDREYEVA, N.S.; DEBAPOV, V.A.; MILLIONOVA, M.I.; SHIBNEV, V.A.;
CHIRGADZE, Yu.N.

Synthetic polymer isomorphic with collagen. Biofizika 6 no. 2:244
'61. (MIRA 14:4)

1. Institut biologicheskoy fiziki AN SSSR, Moskva i Institut
organicheskoy khimii AN SSSR, Moskva.
(POLYMERS) (COLLAGEN)

ANDREYEVA, N.S.

Characteristics of X-ray diffraction on oriented high-molecular
substances. Kristallografiia 6 no.4:524-529 J1-Ag '61.
(MIRA 14.8)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(X ray--Crystallography)

CHIRGADZE, Yu.N.; GRIBOV, L.A.; ANDREYEVA, N.S.; SHUTSKEVER, N.Ye.

Application of infrared spectroscopy in the study of some
crystalline dipeptides containing α -proline and glycine. Zhur.
fiz. khim. 35 no. 4:754-760 Ap '61. (MIRA 14:5)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(Proline--Spectra) (Glycine--Spectra)

ANDREYEVA, N.S.; MILLIONOVA, M.I.

Structure of polymers related to collagen; structure of the low-molecular fraction of polytripeptide (glycine-l-proline-l-hydroxyproline).
Kristallografiia 8 no.4:578-581 J1-Ag '63. (MIRA 16:9)

1. Institut biologicheskoy fiziki AN SSSR.
(Tripeptides)

MILLIONOVA, M. I.; ANDREYEVA, N. S.

"The configuration of the polypeptide chain of the (gly-L-pro-L-hydro) polymer."

report submitted for 6th Gen Assembly, Intl Union of Crystallography, Rome,
9 Sep 63.

Inst of Biophysics, AS USSR, Moscow.

TUMANYAN, V.G.; YESILOVA, N.G.; ANDREYEVA, N.S.

RNA, carrier and code of hereditary information. Biofizika 8
no.1:124-125 '63. (MIRA 17:8)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

MILLIONOVA, M.I.; ANDREYEVA, N.S.; LEBEDEV, L.A.

Structure of polymers related to collagen. Report No.1: Characteristics of two polymer fractions (glycine-l-proline-l-hydroxyproline)n. Biofizika 8 no.4:430-432 '63.

(MIRA 17:10)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

BORISOV, V.V.; LAPUK, Ya.I.; MELIK-ADAMYAN, V.R.; SHUTSFEVER, N.Ye.;
ANDREYEVA, N.S.

X-ray diffraction study of pepsin. Dokl. AN SSSR 156 no. 2:
363-364 My '64. (MIRA 17:7)

1. Institut biologicheskoy fiziki AN SSSR. Predstavleno akademikom
M.M.Shemyakinym.

SHIBNEV, V.A.; ROGULENKOVA, V.N.; ANDREYEVA, N.S.

Structural role of hydroxyproline in collagen. Biofizika 10 no.1:
164-165 '65. (MIRA 18:5)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 32. (USSR) SOV/137-59-3-7213

AUTHOR: Andreyeva, N. V.

TITLE: Black Nickel Plating (Chernyye nikellevyye pokrytiya)

PERIODICAL: Sb. Kom-t' po korrozii metallov Vses. sov. nauchno-tekhn. o-v, 1958, Nr 3, pp 88-93

ABSTRACT: The author proposes a method for a black nickel plating which can be applied on any metal from an electrolyte containing (in g/liter): $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$ 50, $\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$ 25, KCNS 32, and $(\text{NH}_4)_2\text{SO}_4$ 15; pH 4.5-5.5; cathode cd 0.1-0.15 a/dm² at 20°C and 0.4-0.6 a/dm² at 40°. Blackened articles are treated in a 5% K bichromate solution at 60° for 30 min, or at the boiling point of the solution for 15 min, in order to increase the protective capacity of the coating. The author recommends the following methods of preparation of the surface: 1) For steel, pickling in a 20% H_2SO_4 or HCl solution at 50°; 2) for stainless steel, treatment in a solution of the following composition (in g/liter): $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$ 240 and H_2SO_4 50, at 35° for 2-5 min, with subsequent copper plating in a cyanide electrolyte; 3) for brass, a light copper plating in a cyanide electrolyte; 4) for

Card 1/2

SOV/137-59-3-7213

Black Nickel Plating

Duralumin, pickling in a 5% alkali solution at room temperature for 5 min. Cast Silumin can be prepared for blacking in the same way only after it had been sand-blasted. The surface of Duralumin and Silumin can also be coated by contact with a layer from the "Passal" solution of the following composition (in g/liter): 7.5 CuCN, 15 NaCN, 90 ZnO, and 429 NaOH in 10-15 sec, after which the surface can be blackened. Tests carried out in a corrosion chamber simulating tropical climate showed that black Ni plating on steel and Cu alloys surpasses oxide coatings in protective capacity. Bibliography: 3 references.

L. B.

Card 2/2

ANDREYEVA, N.V., inzh.; FINKEL', G.N., inzh.

Launching and ship-raising structures in capitalist countries
[from foreign journals]. Sudostroenie 27 no.11:62-65 N '61.
(MIRA 15:1)

(Shipyards)
(Cranes, derricks, etc.)

137 AND 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

ANDREYEVN, IV. V.

2040. Fluorimetric method of determination of folic acid. N. Y. Andreyev and V. N. Iskhak (G.R. Acad. Sci. USSR, 1949, 24, 2040). Folic acid shows the best fluorescent spectrum at pH 4-5. The sample (0.5-2 g. of yeast; 5 g. of grain; 10-15 g. of green plants) is ground with quartz sand and treated for 45 min. on a steam-bath with 75 ml. of 40% HNO₃. The mixture is cooled, diluted to 100 ml., and filtered. A 25-75-ml. portion is taken, 100 mg. of activated C are added, and the whole is boiled for 5 min., with stirring, filtered by suction, and the C eluted with 3% NH₃ in 70% ethanol 5 times at 60-70°, using a total of 70 ml. The extract is concentrated in 10-15 ml., adjusted to pH 3 by 88% acetic acid, treated with 4% KMnO₄ until the colour persists, and, after 10 min., treated with 3% H₂O₂, dropping until the colour disappears. The pH is adjusted to 4-4.5, the mixture filtered (the vol. being noted), and the fluorescence examined at 480-500 mμ. The standard consisted of folic acid (2 mg.) in 100 ml. of water kept under toluene in a yellow bottle, and diluted 1:10 just before use. The pH is adjusted to 4-5 with acetic acid. A blank is also run. Materials rich in protein require enzymic treatment (with talactamase). The original acid extract is adjusted to pH 4.7 with H₂SO₄ and the enzyme prep. is added. After keeping overnight at 37-40°, the pH is adjusted to 3, the solution diluted to 100 ml., and the above method carried out. The results compare well with microbiological methods. The adsorption charcoal is prepared by washing with 10% aq. aniline for 1 hr. under reflux, washing, and drying at 30-40°. J. T. GREAVES.

ASAC-51A METALLURGICAL LITERATURE CLASSIFICATION

137 AND 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

ANDREYEV, N.V.

USSR.

2409. Method of analysis of tungsten chlorides.
S. A. Shestakova, G. I. Novikova and N. V. Andreyeva
(Zavod. Lab., 1955, 21 (4), 461-463).—It is shown
that WCl_6 boiled with water, or heated in an
atmosphere containing water vapour, is completely
hydrolysed and can be determined from the amount
of HCl produced. The material is placed in a
crucible supported inside and near the closed end
of an inverted test-tube. The open end of the
test-tube stands in a beaker containing a standard
alkali solution. An electric heater round the closed
end is available for heating the crucible to 150° to
200° C. The top of the crucible carries a capillary
tube partly filled with water. When the heater is
switched on, the water is forced into the crucible by
the expansion of air in the capillary. After being
heated for 1 to 1.5 hr. the crucible is removed and
ignited in a muffle-furnace to give the weight of
 WO_3 . Any residue on the walls of the test-tube is
washed into the alkali soln. and the chloride is
determined. The method is suitable also for the
lower chlorides of tungsten and for many other
hydrolyzable chlorides. The apparatus can be used
to remove and determine ammonium chloride in
ammoniacal solutions of WCl_6 . G. S. Smith

W 61

AUTHORS: Shchukarev, S. A., Novikov, G. I., SOV/79-28-7-63/64
 Andreyeva, N. V.
 TITLE: Letter to the Editor (Pis'mo v redaktsiyu). On the Problem
 Concerning the Thermodynamic Investigation of the Lowest
 Tungsten Chlorides (K voprosu o termodinamicheskom issledovanii
 nizshikh khloridov vol'frama)
 PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 7,
 pp. 1998 - 1999 (USSR)
 ABSTRACT: The authors determined by means of the membrane zero reading
 manometer produced of quartz the pressures of the saturated
 and unsaturated vapor of tungsten pentachloride according to
 the static method. They found according to the optical tenso-
 metric method that the gaseous tungsten pentachloride dispro-
 portionates under the formation of tungsten tetra- and tungsten hexa-
 chloride. By the direct determination of the molecular weight
 of the vapor of tungsten pentachloride they found 10% W_2Cl_{10}
 According to the same method with the quartz membrane they
 determined the disproportioning pressures of WCl_2 and WCl_4 .
 Card 1/3

Letter to the Editor. On the Problem Concerning the SOV/79-28-7-63/64
Thermodynamic Investigation of the Lowest Tungsten Chlorides

It was found that the tetrachloride disproportionates in the gaseous phase under the formation of pentachloride, and the dichloride under the formation of penta- and tetrachloride. According to the pressure data of vapor obtained the thermodynamic character of the processes was calculated (Table 1). As far as these experimentally obtained thermodynamic data had not been described in publications it may be assumed that those obtained by the authors are obviously more accurate than those mentioned in tables.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: April 26, 1958

Card 2/3

Letter to the Editor. On the Problem Concerning the SOV/79-28-7-63/64
Thermodynamic Investigation of the Lowest Tungsten Chlorides

1. Tungsten chlorides--Thermodynamic properties
2. Tungsten chlorides--Vapor pressure
3. Vapor pressure--Determination

Card 3/3

tungsten
ANDREYEVA, N.^Y.¹⁰², Cand Chem Sci --, "Thermodynamic study of
chlorides of ~~Wolfram~~." Leningrad, 1959. 12 pp with graphs
(Len Order of Lenin State U in A.A. Zhdanov. Chemical faculty),
150 copies (KL, 27-59, 118)

- 9 -

5(3)

SOV/54-59-1-17/25

AUTHORS: Shchukarev, S. A., Novikov, G. I., Andreyeva, N. V.

TITLE: Thermodynamic Investigation of Lower Tungsten Chlorides
(Termodinamicheskoye issledovaniye nizshikh khloridov vol'frama)

PERIODICAL: Vestnik Leningradskogo universiteta. Seriya fiziki i khimii,
1959, Nr 1, pp 120-131 (USSR)

ABSTRACT: For these investigations compounds WCl_5 and WCl_4 were used, which were obtained from WCl_6 by reduction with hydrogen. WCl_2 was obtained from the decomposition of WCl_4 in vacuum at 450° (Refs 1,4). The three tungsten chlorides were analyzed by vapor hydrolysis, a method that had been worked out by the authors in their work as per reference 9. The vapor pressure of WCl_5 was determined in the temperature range of $150-800^\circ$. The values for the saturated and unsaturated vapor pressures are given in table 1. From the latter the molecular weight of WCl_5 in the vapor phase was determined by the aid of the Mendeleyev-Klaapeyron equation. In this connection the presence of dimers

Card 1/3

SOV/54-59-1-17/25

Thermodynamic Investigation of Lower Tungsten Chlorides

was detected in the vapor and the thermodynamic characteristics of dipolymerization, proceeding according to the scheme $(W_2Cl_{10})_{\text{vapor}} = 2(WCl_5)_{\text{vapor}}$, were calculated. The total pressure and the optical density of WCl_5 in the temperature range of $150-500^\circ$ were measured (measuring results in table 3). These measurements led to the assumption that tungsten pentachloride is disproportionated according to the scheme $2(WCl_5)_{\text{vapor}} = (WCl_4)_{\text{vapor}} + (WCl_6)_{\text{vapor}}$. For this process the thermodynamic characteristics were determined by approximation. From the pressure of the saturated vapor of WCl_5 also the thermodynamic characteristics of sublimation and of evaporation were determined together with the melting and boiling point temperatures. It was further found that WCl_4 is likewise disproportionated, the disproportionation pressure having been measured in the temperature range of from 300 to 600° . Disproportionation is according to the scheme $3 WCl_4 \text{ solid} = WCl_2 \text{ solid} + 2(WCl_5)_{\text{vapor}}$, WCl_4

Card 2/3

SOV/54-59-1-17/25

Thermodynamic Investigation of Lower Tungsten Chlorides

evaporating simultaneously. From the data obtained from the pressure measurements the thermodynamic characteristics were determined for this disproportionation process as well. The disproportionation pressure for the solid WCl_2 was measured in the temperature range of from 490 to 580° (Table 14). There are 15 tables and 15 references, 6 of which are Soviet.

Card 3/3

5 (4)

AUTHORS:

Shchukarev, S. A., Novikov, G. I.,
Andreyeva, N. V.

SOV/54-59-2-11/24

TITLE:

Dependence of the Disproportionation Pressure of Low Tungsten Chlorides on the Composition of the Solid Phase
(Zavisimost' uprugosti disproportsionirovaniya nizshikh khloridov vol'frama ot sostava tverdoy fazy)

PERIODICAL:

Vestnik Leningradskogo universiteta. Seriya fiziki i khimii, 1959, Nr 2, pp 78-82 (USSR)

ABSTRACT:

The thermodynamic characteristic of the disproportionation of WCl_4 and WCl_2 to the final products WCl_6 and metallic W respectively, is only possible if in the existing solid phase no interaction of these substances occurs. In this connection, investigations of the dependence mentioned in the title were carried out here. WCl_6 was used as initial product for the preparation of the low tungsten chlorides. WCl_4 was obtained by repeated reduction (Refs 3-5) in the dry hydrogen current, and WCl_2 by disproportionation of the latter. The initial

Card 1/3

Dependence of the Disproportionation Pressure of Low Tungsten Chlorides on the Composition of the Solid Phase SOV/54-59-2-11/24

mixture used for the investigation, which contained WCl_5 , WCl_4 and WCl_2 and also metallic W, was analyzed by pyrolysis (Ref 6). The results are indicated in table 1. The steam pressure over the mixture was statically determined by a quartz-diaphragm zero manometer (see Refs 7, 8). The total pressure of the steam over a $WCl_5 + WCl_4$ mixture with different ratios Cl:W at different temperatures (Table 2) shows that the isothermal line of the steam pressure at the interval 4.6-4.0 Cl:W assumes the values of the isothermal line of the disproportionation pressure of the pure WCl_4 . This statement shows that there is a certain limited solubility between WCl_5 and WCl_4 . The insolubility of the mentioned substances in one another is determined by the pressure of the disproportionated steam over the $WCl_4 + WCl_2$ mixture at various ratios Cl:W (Table 3) which shows perfectly horizontal isothermal lines. Table 4 shows the disproportionation

Card 2/3

Dependence of the Disproportionation Pressure of SOV/54-59-2-11/24
Low Tungsten Chlorides on the Composition of the Solid Phase

pressures of the steam over a mixture of WCl_2 + metallic W.
It shows that there is a certain interaction between the mentioned substances. A comparative X-ray investigation showed that WCl_2 exists in the range 2.0-1.7, and some unknown lines can be observed beside the lines of the latter; in the range 1-0, there are only the lines of pure metallic tungsten beside some unknown lines. Therefore, the determination of the disproportionation scheme of the mixture WCl_2 is rendered very difficult by the existence of a solubility of WCl_2 and W in one another. There are 4 tables and 8 references, 3 of which are Soviet.

SUBMITTED: June 4, 1958

Card 3/3

SHCHUKAREV, S.A.; NOVIKOV, G.I.; ANDREYEVA, N.V.

Thermodynamic investigation of the lower tungsten chlorides.
Vest.LGU 14 no.4:120-131 '59. (MIRA 12:5)
(Tungsten chlorides)

SHCHUKAREV, S.A.; NOVIKOV, G.I.; ANDREYEVA, N.V.

Effect of the composition of the solid phase on the disproportiona-
tion pressure of lower tungsten chlorides. Vest.LGU 14 no.10:
78-82 '59. (MIRA 12:6)
(Tungsten chlorides)

CAN 3/3

THE Thermodynamic Properties of Chlorides
and Oxychlorides of Tungsten and Molybdenum
ASSOCIATION: 5/076/60/005/006/002/018
5004/5052
Submitted: May 6, 1959
(Submitted State University Department of Chemistry)

THE Thermodynamic Properties of Chlorides
and Oxychlorides of Tungsten and Molybdenum
5/076/60/005/006/002/018
5004/5052
tion of WOCl_3 and WCl_6 and MoCl_3). Two calorimetric methods were applied:
1) Comparison of the heat of solution of the investigated substance to the
heat of solution of a substance whose heat of formation is known (Table 1).
2) Combustion in oxygen (Table 2). Furthermore, the vaporization, depoly-
merization, dissociation, and disproportionation processes taking place in
series of equilibria, were spectrophotochemically and thermodynamically
investigated (Table 3). The enthalpies of formation, and partly also
the standard Gibbs free energy of formation, were calculated from the experimental
data. In Table 5 (No compounds 6-8 compounds) they are compared
with the data given in Ref. 2 which were obtained by the
US National Bureau of Standards (Ref. 3). The values obtained by the
authors are 1.4 - 1.7 times as high. Therefore, the dependence of the
free energy of formation on temperature is different altogether. This is
graphically represented in Fig. 1 (comparison of determined ΔG and ΔG°
for tungsten compounds, with the data of the National Bureau of Standards),
and Fig. 2 (comparison of the ΔG of Cr , Mo , and γ chlorides, with
the data of the National Bureau of Standards). There are 2 figures,
6 tables, and 3 references: 6 Soviet, 2 US, and 1 Dutch.

ATTACHED: Shcheglov, S. A., Solov'ev, G. L., Yashchikov, I. E.,
Sidorov, A. F., Adzhizov, S. Z., Shcheglov, S. A.,
Krylov, I. E.
TITLE: The Thermodynamic Properties of Chlorides and Oxychlorides
of Tungsten and Molybdenum
SYNOPSIS: Thermal spectrophotochemical method, 1960, Vol. 5, No. 8,
pp. 1630-1634
TEXT: By applying various methods, the authors wanted to check the
formation heats, formation enthalpies, and formation Gibbs free energies in the case
of Mo- and W chlorides, published in various papers (Ref. 1, 2). They
investigated: WOCl_3 , MoCl_3 , WCl_6 , MoCl_5 , W_2Cl_{10} (obtained by a successive
chlorination of W and Mo by means of Cl_2), Mo_2Cl_8 (obtained by the
reaction between MoO_3 and Cl_2), MoCl_3 , WCl_3 , WCl_4 (by the reduction of
 WOCl_3 and WCl_6 by means of H_2), and MoCl_3 , WCl_3 (obtained by disproportion-

S/137/62/000/001/068/237
A060/A101

AUTHORS: Radomysel'skiy, I. D., Kutnyak, V. A., Andreyeva, N. V.

TITLE: Automatic gas combination furnace for sintering of metallo-ceramic articles and conversion of natural gas

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 1, 1962, 42, abstract 10324 ("Poroshk. metallurgiya", 1961, no. 3, 91-99, English summary)

TEXT: The authors describe the design of a furnace for sintering of metallo-ceramic articles in an environment of gas under conversion. The furnace is heated by natural gas, burned in flameless burners, and is designed for the use of carbofraxine muffles. The furnace is equipped with a device for obtaining converted natural gas from a steam-gas mixture $\text{CH}_4 - \text{H}_2\text{O}$ (1:1). The furnace productivity is up to 15 kg/h, working temperature - up to $1,200^\circ\text{C}$. The furnace operation is automated, the trays with the parts are fed into the furnace by means of hydraulic pushers. The blowing through of the loading and the unloading chambers by neutral gases is provided for. The sintering furnace has two zones of temperature regulation.

R. Andriyevskiy

[Abstracter's note: Complete translation]
Card 1/1

5.2200

26282
S/078/61/006/009/001/010
B107/B101

AUTHORS: Novikov, G. I., Andreyeva, N. V., Polyachenok, O. G.

TITLE: New method for the synthesis of low tungsten chlorides

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 6, no. 9, 1961, 1990-1993

TEXT: The object for the present study was to elaborate a method permitting the production of larger quantities (kilograms) of low tungsten chlorides. Production by reduction of WCl_6 with hydrogen is not advantageous, and for larger quantities it also requires special apparatus because of the danger of explosion hazard. This study gives theoretical considerations and their experimental confirmation with regard to the reduction of WCl_6 with phosphorus. On the basis of the thermodynamic data (S. A. Shchukarev, G. I. Novikov et al., Referaty dokladov VIII Mendeleyevskogo s"yezda, (Abstracts of the reports from the 8th Mendeleyev Congress), no. 4, sektsiya fiz. khimii, M., 1958, p. 220), a good yield of the compounds WCl_5 and WCl_4

Card 1/4

New method for the synthesis...

26282

S/078/61/006/009/001/010

B107/B101

is found to form from WCl_6 and white phosphorus at $200^\circ C$. Moreover, the equilibrium of the reaction $[WOCl_4]_s + (PCl_3)_g \rightleftharpoons [WCl_4]_s + (POCl_3)_g$ at $200^\circ C$ lies almost entirely on the right-hand side, so that the final reduction product would be free of contaminating oxychloride (s = solid; g = gas). Phosphorus has also the advantage that it may be accurately dosed and the reaction conducted in the evacuated glass vessel. Red phosphorus was used for the experiments and the reaction temperature was therefore raised to $250-300^\circ C$. WCl_6 was prepared by reaction of tungsten with chlorine at $500-600^\circ C$. A glass apparatus (Fig.) was used for preparing low chlorides. WCl_6 and phosphorus were filled into vessel B. For the preparation of WCl_5 , slightly more than the stoichiometrically required quantity of phosphorus was used, slightly less for that of WCl_4 . The vessel is then evacuated and sealed at a. B is heated to $250-300^\circ C$, the volatile PCl_3 and $POCl_3$ are condensed in C. After the reaction, C is

Card 2/4

POLILOV, M.I.; ANDREYEVA, N.V.; MIRONOVA, T.M.; VETROVA, A.A.

Treatment of chronic lupus erythematosus with resochin in combination
with pathogenic and roborant substances. Sov.med. 25 no.12:100-102
D '61. (MIRA 15:2)

1. Iz Kurskogo oblastnogo kozhno-venerologicheskogo dispansera (glavnyy
vrach M.I.Polilov).
(LUPUS ERYTHEMATOSUS) (QUINOLINE)

16 7400 1087 *also* 1043, 1208

S/076/61/035/004/011/018
B106/B201

AUTHORS: Samartsev, A.G., and Andreyeva, N. V.

TITLE: The formation process of precipitates of "black nickel"

PERIODICAL: Zhurnal fizicheskoy khimii, v. 35, no. 4, 1961, 892 - 899

TEXT: "Black nickel" is the designation for black precipitates of a complicated composition (16-60% nickel, 7-45% zinc, 8-15% sulfur, 10-28% carbon, hydrogen, and oxygen), which are formed on the cathode in the electrolysis of solutions containing nickel-, zinc-, and ammonium salts, and rhodanate ions. Great practical importance is attached to this "black nickel", as it can be deposited on various metals as a compact jet-black coating. In continuation of previous papers on the solution of practical problems (Ref. 3: Chernoye nikelirovaniye, informatsionno-tekhnicheskii listok No. 106 (679), LDNTP, L., 1954; Ref. 4: Optiko-mekhanicheskaya promyshlennost', No. 3, 65, 1957), new data are offered here regarding the formation process of "black nickel". The electrolyte solution contained 50 g/l $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$, 25 g/l $\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$, 32 g/l KCNS, and 15 g/l $(\text{NH}_4)_2\text{SO}_4$, and had a pH 5. The cathode was a 6.4 cm² steel sheet, the rear side of

Card 1/5

The formation process of ...

S/076/61/635/004/011/013
B105/B201

which was insulated by celluloid lacquer. The experiments were performed at $20 \pm 0.2^\circ\text{C}$, and the cathode potential was measured by the conventional compensation method 5 minutes after adjusting the current. Results: The main characteristic feature of galvanic precipitates of "black nickel" consists in that they contain only a relatively small part of free nickel metal, distributed as very small, separate grains in the mass of the products of secondary electrode reactions. The precipitate exhibits electrical conductivity which is explained by the semiconductor properties of zinc sulfide and hydrated zinc oxide, which constitute the main components of the products of secondary electrode reactions. The color of "black nickel" is not caused by the content of dark-colored compounds, but is due to the structural characteristics of the precipitate. The black precipitate is formed after an abrupt rise of cathode polarization, not due to reaching the limiting current, but by a passivation of the cathode surface. This is also proved by the fact that uniform bright nickel precipitates were obtained in a wide range of current densities in experiments with solutions containing only nickel- and ammonium salts. In this case no abrupt change took place in the cathode polarization. An

Card 2/5

S/076/51/035/004/011/018
B106/B201

The formation process of ...

abrupt rise of polarization, however, occurred already at low current densities, if small amounts of a zinc salt were added. Immediately after this, the nickel deposition was reduced, and the hydrogen separation increased. These results are indicative of the fact that the cathode surface is passivated by a layer of hydrated zinc oxide, which is an obstacle to the further growth of pure nickel grains. At the same time also the zinc sulfide resulting from the decomposition of rhodanate present in the solution is precipitated. The abrupt rise of cathode polarization leads to a stronger decomposition of rhodanate and thus to the enrichment of the precipitate with zinc sulfide. Because of its better electrical conductivity, the zinc sulfide attenuates the inhibiting effect of hydrated zinc oxide upon the discharge of nickel ions. The rhodanate ions contained in the electrolyte reduce the cathode polarization, and thus the potential jump, considerably. Ammonium ions, owing to their buffer action and their ability to form stable complex compounds, uphold the deposition of the passivating layer of hydrated zinc oxide at the cathode. In the absence of the ammonium salt the cathode is much less passivated, and more pure nickel is deposited. The acidity of the electrolyte also has an effect upon the deposition of "black nickel": no secondary electrode reactions, and therefore, no black precipi-

Card 3/5

The formation process of ...

S/075/61/035/004/011/012
B106/B201

pitates, either, appear in strongly acid solutions. Most probably, the processes taking place in the formation of the black precipitates at the cathode have a periodic character. Formation and development of nickel crystals alternate continuously, in every point of the cathode surface, with the deposition of secondary electrolysis products on these crystals. The chemical analysis of the precipitates was made by the collaborators of the Leningradskiy tekhnologicheskii institut im. Lenseveta (Leningrad Institute of Technology, imeni Lenseveta) A. D. Miller and R. I. Libina. There are 7 figures, 1 table, and 11 references; 5 Soviet-bloc and 6 non-Soviet-bloc. The three most recent references to English language publications read as follows: U.S. Bur. Stand. Techn. Pap., N 100; J. G. Peor, Metal Finishing, 694, 769, 1943; S. Glasstone, J. Chem. Soc., 641, 1927.

SUBMITTED: July 27, 1959

Card 4/5

The formation process of ...

S/076/61/035/004/011/018
B106/B201

Fig. 1:

1) cathode polarization in the precipitation of "black nickel"; 2) and a) hydrogen yield according to the current.

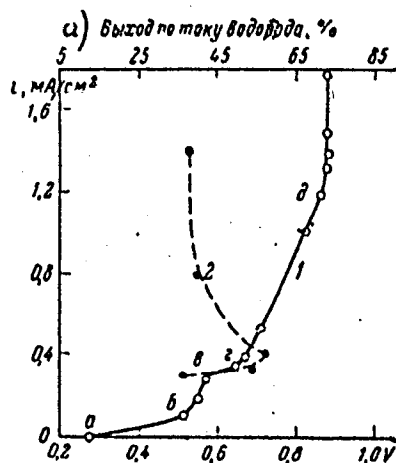


FIG. 1

Card 5/5

ANDREYEVA, N. V.; POLILOV, M. I.

Familial lupus erythematosus. Vest. dermat. i ven. no. 6:72-73
'61. (MIRA 15:4)

1. Iz Kurskogo oblastnogo kozhno-venerologicheskogo dispansera
(glavnyy vrach M. I. Polilov)

(LUPUS)

POLILOV, M.I.; ANDREYEVA, N.V.

Structure and dynamics of skin disease incidence in Kursk
from 1959 to 1960. Vest.derm. i ven. no.9:62-64'62.

(MIRA 16:7)

1. Iz Kurskogo oblastnogo kozhno-venerologicheskogo dispansera
(glavyy vrach M.I.Polilov).

(KURSK—SKIN—DISEASES)

POLILOV, M.I.; ANDREYEVA, N.V.

Structure and characteristics of the course of some dermatoses
in elderly and senile persons. Vest. dermat. i ven. no.2:47-52
'64. (MIRA 17:11)

1. Kurskiy oblastnoy kozhno-venerologicheskoy dispensar (glavnyy
vrach M.I. Polilov).

ANDREYEVA, N.V.; KUTYANIN, G.I.

Characteristics of pore fillers used in the furniture industry.
Der. prom. 14 no.8;29-31 Ag '65. (MIRA 18:10)

ANDREYEVA, N.V.; KUTYANIN, G.I., doktor tekhn. nauk

Effective methods for estimating the degree of filling wood
pores. Der. prom. 14 no. 12:7-8 D '65. (MIRA 18:12)

ANDREYEVA, N.Ye.; IOPTE, R.A.

Proteins, glycoproteins and lipoproteins of the blood serum in multiple myeloma and Waldenstrom's macroglobulinemia. Probl. gemat. i perel. krovi 9 no.6:18-23 Je '64. (MIRA 18:2)

1. 3-ya kafedra terapii (zav.- deystvitel'nyy chlen AMN SSSR prof. I.A. Kassirskiy) i kafedra tuberkuleza (zav.- prof. A.Ye. Rabukhin) Tsentral'nogo instituta usovershenstvovaniy vrachey, Moskva.

ANDREYEVA, N.Ye.; RYZHKOVA, N.P.

Pathogenesis and clinical diagnosis of paraproteinemia. Ter.
arkh. 35 no.4:64-74 Ap'63 (MIRA 17:1)

1. Iz 3-y kafedry terapii (zav. - chlen-korrespondent AMN SSSR
I.A. Kassirskiy) Tsentral'nogo instituta usovershenstvovaniya
vrachey na baze Tsentral'noy klinicheskoy bol'nitsy Minister-
stva putey soobshcheniya imeni N.A. Semashko.

ANDREYEVA, N.Ye.

Intracellular crystalloid inclusions in multiple myeloma.

Problemy gemat. i perel. krovi 8 no.8:46-48 Ag '63.

(MIRA 17:8)

1. Iz 3-y kafedry terapii (zav. - zhlen-korrespondent AMN SSSR
prof. I.A. Kassirskiy) Tsentral'nogo instituta usovershenstvo-
vaniya vrachey.

ANDRUYEVA, N. P. (Moscow)

Paraproteinosis in myeloma. Arkh. pat. no.12:3-14 '62
(MIRA 18:1)

1. Iz III kafedry terapii (zav. - chlen-korrespondent AMN SSSR
prof. I.A. Kassirskiy) Tsentral'nogo instituta usovershenstvovaniya vrachev.

ANDREYEVA, N.Ye.

Myeloma combined with generalized xanthomatosis. Probl. gemat. i
perel. krovi 9 no.11:38-43 N '64. (MIRA 18:4)

1. III kafedra terapii (zav. - deystvitel'nyy chlen AMN SSSR prof.
I.A. Kassirskiy) Tsentral'nogo instituta usovershenstvovaniya
vrachey, Moskva.

ANDREYEVA, N.Ye.; SEROV, V.V.

Nephropathy in multiple myeloma (paraproteinemic nephrosis). Vest.
AMN SSSR 19 no.6:46-54 '64. (MIRA 18:4)

1. TSentral'nyy institut usovershenstvovaniya vrachey, Moskva i
I Moskovskiy meditsinskiy institut imeni Sechenova.

ANDREYEVA, O.A.

stability and introduces a supplementary classification of manganin conductors with respect to temp coeff of resistance. Submitted 30 Nov 49.

USSR/Electricity - Conductors (Contd) Jun 51

200719

USSR/Electricity - Conductors Jun 51

"Technical Requirements of Manganin Conductors," O. A. Andreyeva, Engr, Prof K. B. Karandeyev, V. A. Kochan, Engr, B. S. Sintayn, Cand Tech Sci, L'vov Polytech Institute

"Elektrichestvo" No 6, pp 67-69

Examines existing tech specifications for manganin conductors from the standpoint of modern elec-instrument building requirements. Suggests new criteria for detg the

ANDREYEVA, O.A.; KULYGIN, M.F.

Unit for rectification of tall oil. Gidroliz. i lesokhim. prom.
16 no.7:31-32 '63. (MIRA 16:11)

1. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy
leskohimicheskoy promyshlennosti.

HINDAL-1277, C. 3.

EXCERPTA MEDICA Sec.3 Vol.11/5 Endocrinology May 57

869. ANDREEVA O. D. Dept. of Med. Diagnosis, Med. Inst., Gorkii, USSR. *Izmenenie pogloshcheniya radioaktivnogo ioda shchitovidnoi zhelezoi pri revmatisme. Changes in the absorption of radioactive iodine by the thyroid gland in rheumatism KLIN. MED. (Mosk.) 1956, 34/3 (30-32)

Of 43 patients with rheumatism in the active form 20 showed increased I^{131} uptake by the thyroid gland, 21 showed normal absorption, and 2 showed decreased absorption. The relation of the uptake of I^{131} to the patients' age and to the degree of circulatory impairment was not established. Twelve patients with rheumatism in the latent form, 2 patients with rheumo-sepsis, and 3 out of the 5 patients with cardiac disorders of uncertain aetiology showed no disturbance of I^{131} uptake.

Raukin - Leningrad

ANDREYEVA, O. D., Cand Med Sci -- (diss) "Data ^{for} ~~on~~ the study
of vascular reactions and ^{the} function of the thyroid gland in
rheumatism." Gor'kiy, 1957. 13 pp (Gor'kiy State Med Inst
im S. M. Kirov), 200 copies (KL, 1-58, 120)

- 84 -

LIBRARY : USSR
CATEGORY : Human and Animal Physiology, Internal Secretion
ABST. JOURN. : RZhBiol., No. 5 1959, No. 22257
AUTHOR : Andreyeva, O.D.
INST. : ~~THE GOVERNMENT OF THE USSR~~
TITLE : Thyroid Function and Vascular Reactions in
Rheumatism.
ORIG. PUB. : V sb.: Radioakt. iod v diagnostike vnutr. bolez-
ney. Gorky, 1958, 46--57
ABSTRACT : no abstract

Card: 1/1

T-62

LOKSHIN, E.Yu., prof., doktor ekon.nauk; ANDREYEVA, O.I., kand.ekon.nauk;
VOROSHILOVA, T.S., dotsent, kand.ekon.nauk; TARAS'YANTS, dotsent,
kand.ekon.nauk; FASOLYAK, N.D., dotsent, kand.ekon.nauk; EYDEL'MAN,
M.R., kand.ekon.nauk; YAKOBI, A.A., dotsent, kand.ekon.nauk;
PISKUNOV, V., red.; MUKHIN, Yu., tekhn.red.

[Economics of the supply of materials and equipment; a textbook]
Ekonomika material'no-tekhnicheskogo snabzheniia; uchebnoe posobie.
Moskva, Gos.izd-vo polit.lit-ry, 1960. 510 p.

(MIRA 13:11)

(Industrial procurement)

LOKSHIN, E.Yu., doktor ekon. nauk; ANDREYEVA, O.I., kand. ekon. nauk, dots.; VOROSHILOVA, T.S., kand. ekon. nauk, dots.; SADOMTSEV, V.K., kand. ekon. nauk, dots.; SMIRNOV, P.V., kand. ekon. nauk, dots.; TARAS'YANTS, R.B., kand. ekon. nauk, dots.; FASOLYAK, N.D., kand. ekon. nauk, dots.; LOZOV, Ya.D., st. prepod.; SHMELEVA, Z.S., st. prepod.; NOVIKOV, D.T., aspirant; PORA-LEONOVICH, B.N.; ALEKSANDROVSKIY, V.V.; BURSHTEYN, I.I.; EYDEL'MAN, B.I., red.; MOZGALEVSKAYA, S.A., mlad. red.; GERASIMOVA, Ye.S., tekhn. red.

[Manual for the supplying and selling of materials and equipment] Spravochnik po material'no-tekhnicheskomu snabzheniiu i sbytu. Moskva, Ekonomizdat, 1963. 344 p.
(MIRA 17:1)

1. Nachal'nik ekonomicheskogo otdela Upravleniya material'no-tekhnicheskogo snabzheniya Soveta narodnogo khozyaystva Moskovskogo gorodskogo ekonomicheskogo rayona (for Pora-Leonovich).
2. Nachal'nik otdela snabzheniya 1-go Gosudarstvennogo podshipnikovogo zavoda (for Aleksandrovskiy).

ANDREYEVA, O.I.; CHERNOVA, T.G.

Comparative study of hemopoiesis of the marrow and the peripheral blood in rabbits under the climatic and geographical conditions of the eastern Pamirs. Trudy Tadzh. med. inst. 62:47-50 '63.

(HHS 17:12)

1. Tadzhikskiy meditsinskiy institut imeni Abuali ibni Sino,
Dushanbe.

1ST AND 2ND SERIES										3RD AND 4TH ORDER																																																																																																																																																															
COMMON ELEMENTS																																																																																																																																																																									
COMMON VARIABLE MOVS																																																																																																																																																																									
ANDREYEV, G. I.																																																																																																																																																																									
PROCESS AND PROPERTIES INDEX																																																																																																																																																																									
18																																																																																																																																																																									
<p>A study and comparison of oxidizers which produce iodine. O. I. Andreyev and B. B. Vasil'ev. <i>J. Chem. Ind.</i> (U. S. S. R.) 16, 1097-1105 (1937).—The most active oxidizer for forming I_2 from dil. NaI solns. is $Ca(OCl)_2$, which reacts even in alk. solns. $KMnO_4$ is nearly as good, though if too much is used, oxidation is carried all the way to $NaIO_3$. $NaNO_3$, $K_2Cr_2O_7$ and $KClO_3$, active only in acid solns., are less effective. The reaction rate in all cases depends chiefly on the pH of the soln. and to a lesser degree on the concn. of the oxidizer and the temp. $Ca(OCl)_2$ is most active at pH 2.5-3.0. The others need more acid solns. With $K_2Cr_2O_7$ and $KClO_3$ the reaction is bimol. The other reactions follow neither uni- nor bimol. equations.</p> <p>H. M. Leicester</p>																																																																																																																																																																									
ASB-31A METALLURGICAL LITERATURE CLASSIFICATION																																																																																																																																																																									
<table border="1"> <thead> <tr> <th colspan="10">10000 SYMBOLS</th> <th colspan="10">100000 NLT ONLY DET</th> <th colspan="10">SUBSTITUTION</th> <th colspan="10">10000 SYMBOLS</th> <th colspan="10">SUBSTITUTION OF ONLY 1ST</th> </tr> <tr> <td colspan="10"></td> <td colspan="10"></td> <td colspan="10"></td> <td colspan="10"></td> <td colspan="10"></td> </tr> </thead> <tbody> <tr> <td colspan="10"></td> <td colspan="10"></td> <td colspan="10"></td> <td colspan="10"></td> <td colspan="10"></td> </tr> </tbody> </table>																				10000 SYMBOLS										100000 NLT ONLY DET										SUBSTITUTION										10000 SYMBOLS										SUBSTITUTION OF ONLY 1ST																																																																																																													
10000 SYMBOLS										100000 NLT ONLY DET										SUBSTITUTION										10000 SYMBOLS										SUBSTITUTION OF ONLY 1ST																																																																																																																																	

ANDREYEVA, O. I.

Fractional purification of Ni electrolytes for the removal of Fe and Co. Ya. M. Pesin, O. I. Andreyeva, A. A. Moreno and M. P. Schmanzar. *Trudy Metal.* 16, No. 29-35 (1941); *Chem. Zentr.* 1943, I, 1802.—With NaClO and NiSO₄ in the presence of NaOH the reactions $\text{Ni(OH)}_2 + \text{NaClO} + \text{H}_2\text{O} = \text{Ni(OH)}_3 + \text{NaCl}$ and $\text{NiSO}_4 + 2\text{NaOH} = \text{Ni(OH)}_2 + \text{Na}_2\text{SO}_4$ occur. Increasing the amt. of NaClO from 0.8 to 2.0 equiv., calcd. on the NiO₂ content, increased the active O in the black hydrate. Further increase in the amt. of NaClO added had no further effect on the activity of the hydroxide obtained. A max. of 48% of the hypochlorite was used for the oxidation of the Ni, the remainder being decomposed by the catalytic action of the black hydrate. Between 0° and 20° the reaction proceeded quietly. As the temp. was increased to 40° the reaction was more violent, and it was necessary to add the NaClO and NaOH carefully. Increasing the temp. decreased the amt. of active O in the black hydrate. Increasing the amt. of alkali at const. hypochlorite concn. increased the amt. of O in the black hydrate; thus, at 1.13 equiv. NaOH the product was NiO₂ and at 10.0 equiv. it was NiO₂. Varying the concn. of NaClO and that of NiSO₄ had no effect on the activity of the black hydrate. Fractional addn. of the NaClO (0.1-0.5 equiv. per mol.) gave a hydrate higher in O than that obtained when the NaClO was added all at once. Fractional addn. of the NaClO likewise increased its utilization coeff. When Na₂CO₃ was used instead of NaOH the active O content of the hydrate was considerably lower. Optimum conditions for obtaining the black hydrate are: hypochlorite 1.5 equiv. (calcd. on the NiO₂), NaOH 1.1 equiv., room temp. and fractional addn. of the NaClO. The black hydrate thus obtained contained 60-65% active O. Washing the black hydrate with water decreased the activity by an amt. that depended on the temp. of the water and the compn. of the hydrate; i.e. water caused the least pronounced loss of activity. The loss was greater on washing hydrate that was not freshly prepd. The addn. of alkali (5%) to the wash water stabilized the black hydrate. M. G. Moore

ASB-51A DETAILURGICAL LITERATURE CLASSIFICATION

FROM SYNDICATE

REPORTS ON ONLY ONE

RELATIONS

REPORT ON ONLY ONE

NO. 1

NO. 2

NO. 3

NO. 4

NO. 5

NO. 6

NO. 7

NO. 8

NO. 9

NO. 10

NO. 11

NO. 12

NO. 13

NO. 14

NO. 15

NO. 16

NO. 17

NO. 18

NO. 19

NO. 20

NO. 21

NO. 22

NO. 23

NO. 24

NO. 25

NO. 26

NO. 27

NO. 28

NO. 29

NO. 30

NO. 31

NO. 32

NO. 33

NO. 34

NO. 35

NO. 36

NO. 37

NO. 38

NO. 39

NO. 40

NO. 41

NO. 42

NO. 43

NO. 44

NO. 45

NO. 46

NO. 47

NO. 48

NO. 49

NO. 50

NO. 51

NO. 52

NO. 53

NO. 54

NO. 55

NO. 56

NO. 57

NO. 58

NO. 59

NO. 60

NO. 61

NO. 62

NO. 63

NO. 64

NO. 65

NO. 66

NO. 67

NO. 68

NO. 69

NO. 70

NO. 71

NO. 72

NO. 73

NO. 74

NO. 75

NO. 76

NO. 77

NO. 78

NO. 79

NO. 80

NO. 81

NO. 82

NO. 83

NO. 84

NO. 85

NO. 86

NO. 87

NO. 88

NO. 89

NO. 90

NO. 91

NO. 92

NO. 93

NO. 94

NO. 95

NO. 96

NO. 97

NO. 98

NO. 99

NO. 100

24.1200
18.1210

62030

SOV/137-59-10-23230

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 10, p 285 (USSR)

AUTHORS: Lokshin, F.L., Andreyeva, O.I.

TITLE: Quench-Hardening Aluminum Alloys in a Field of Hydraulic Shocks of Ultrasonic Frequency

PERIODICAL: Byul. tekhn.-ekon. inform. Sovnarkhoz Rostovsk. ekon. adm. r-na, 1958, Nr 12, pp 49 - 50

ABSTRACT: The peculiarity of the method consists in the simultaneous action upon the metal of hydraulic shocks and ultrasonic oscillations caused by electric discharges in water. For investigations some "D1T" Duralumin specimens (3.8% Cu, 1.4% Mg) were water quenched at 500 - 510°C; others were heated up to 500 - 510°C and quenched in a field of hydraulic shocks of ultrasonic frequency. Subsequently the specimens were subjected to natural aging. It was established by ro ntgenostructural analysis and hardness measurement that the quench-hardening in the field of hydraulic

Card 1/2

20373

24:1900 1063, 1155, 1162

S/058/61/000/003/016/027
A001/A001

Translation from: Referativnyy zhurnal, Fizika, 1961, No. 3, p. 323, # 3E338

AUTHORS: Lokshin, F. L., Lyutsedarskiy, V. A., Derevyannykh, A. P., Andreyeva, O. I.

TITLE: The Effect of Ultrasonic-Frequency Hydraulic Impacts on the Structure of Hardened Alloys

PERIODICAL: "Tr. Novocherk. politekhn. in-ta", 1959, Vol. 73, "Raboty Kafedry fiz.", pp. 81-95

TEXT: Treatment of \bar{A} -1 (D-1) Duralmin by hydraulic impacts of ultrasonic frequency results in a considerable acceleration of the aging process: after treatment by hydraulic impacts for 3 min the same hardness is obtained as after artificial aging for 30 min or after natural aging during 6.5 - 7 hours. An X-ray examination showed that under the action of hydraulic impacts the grains become finer, texture appears and the lines of roentgenograms are widening. In X18H9 (Kh18N9) steel (18% Cr, 8% Ni) with the martensite point -60°C the treatment by hydraulic impacts results in the formation of martensite at room tempera-

Card 1/2

22464

S/186/60/002/001/018/022
A057/A129

5.2500(1273, 1350, 1043)

AUTHORS: Andreyeva, O.I.; Il'ina, A.I.

TITLE: Preparation of elemental carbon labeled with C^{14}

PERIODICAL: Radiokhimiya, v. 2, no. 1, 1960, 107 - 111

TEXT: Optimum conditions for the preparation of C^{14} -labeled elemental carbon were investigated and the reactions of barium carbide with chlorine, bromine, carbon tetrachloride and carbon monoxide were studied. R. Abrams [Ref. 2: J. Am. Chem. Soc., 71, 3875 (1949)] used the reaction $CO_2 + 2Mg = C + 2MgO$ (discovered in 1867 by Parkinson) to prepare radioactive carbon as intermediate product in the synthesis of C^{14} -cyanide from C^{14} -barium carbonate. A.N. Campbell and E.A. Brown [Ref. 3: J. Am. Chem. Soc., 60, 3055 (1938)] obtained elemental carbon by the reaction $CO_2 + 2Mn = C + 2MnO$. This method was applied by T.A. Rafter [Ref. 4: New Zealand, J. Sci. and Technol., B 35, 1, 64 (1953)] in growth measurements with C^{14} . Elemental carbon can be prepared by reactions of CaC_2 with CO , CO_2 , CCl_4 or $CHCl_3$. According to J. Turkevich and F. Bonner [Ref. 6: J. Am. Chem. Soc., 73, 561 (1951)] an isotopic exchange between carbon and carbon dioxide gas does not occur at about $500^\circ C$. A.D. Kirshenbaum et al. [Ref. 7: Analyt. Chem.,

Card 1/4

22464

S/186/60/002/001/018/022
A057/A129Preparation of elemental carbon labeled with C^{14}

23, 10, 1440 (1956)] obtained by the exchange $C^{14}O_2 - C^{12}$ at about 900 - 1,000°C C^{14} -labeled carbon black with a specific activity of ~0.04 mc/g. The present investigations were carried out making allowance for these literature data. Barium carbide was prepared from barium carbonate $2BaCO_3 + 5Mg = BaC_2 + BaO + 5MgO$ at 900°C in a hydrogen gas flow. The product containing ~30% BaC_2 and $BaO + MgO$ was placed (in 1 - 1.5 g weights) in a tubular oven and the gas passed through it at varying temperatures. The residual product was boiled with HCl to remove elemental carbon from admixtures. These halogenation experiments, using Cl_2 , Br_2 or CCl_4 , demonstrated that the side reaction of oxide chlorination prevents practical use of these reactions for preparation of C^{14} -labeled carbon. In the reaction $BaC_2 + CO = BaO + 3C$ this lack is avoided, but isotopic exchange between $C^{12}O - C^{14}$, and $C^{12}O - BaC_2^{14}$ is essential. The reaction was studied at temperatures from 400 to 700°C and a duration of 2 - 5 h. Complete decomposition is reached at 700°C in 2 h. In order to avoid eventual losses of C^{14} by isotopic exchange with increasing temperature, corresponding experiments were made and it was observed that at 600 and 700°C isotopic exchange between BaC_2^{14} and C^{14} with $C^{12}O$ is low (Table 3). From C^{14} barium carbonate at optimum conditions (700°C, 2 h) C^{14} -labeled carbon is obtained with more than 70% activity yields and a specific activity of up to 100 mc/g (Table 4). By increasing the specific activity of $BaCO_3$,

Card 2/4

ANDREYEVA, O.I.; KOSTIKOVA, G.I.

Isotopic exchange of C^{14} in the systems, KCN - CO_2 , KCN - CO.
Trudy GIPKH no.49:149-158 '62. (MIRA 17:11)

S/810/62/000/000/008/013

AUTHORS: Lokshin, F. L., Andreyeva, O. I.

TITLE: Effect of hydraulic shocks and of ultrasonic-frequency mechanical vibrations on aging and recrystallization processes in aluminum alloys.

SOURCE: Metallovedeniye i termicheskaya obrabotka; materialy konferentsii po metallovedeniyu i termicheskoy obrabotke, sost. v g. Odesse v 1960 g. Moscow, Metallurgizdat, 1962, 233-239.

TEXT: The paper reports the results of an experimental investigation on the effect cited in the title and concludes that treatment of metals in a field of hydraulic shocks and ultrasonic (HSUS) mechanical vibrations accelerates the aging process by 120-140 times with respect to natural aging or by 6-10 times as compared with artificial (high-temperature) aging; that the hardness of freshly quenched specimens treated in a HSUS field, after natural aging, remains more elevated than the hardness of specimens treated in the ordinary manner; that the recrystallization process proceeds more intensively in a HSUS field than under ordinary conditions; that treatment in a HSUS field reduces the recrystallizational-inception (RI) temperature (T) of Al alloys Д1 (D1) and АЛ8 (AL8) by 270-370°C; and that the grain growth in a HSUS field is significantly greater than in ordinary conditions

Card 1/3

Effect of hydraulic shocks and of ultrasonic- ...

S/810/62/000/000/000/013

of anneal of deformed metals. Specimens of the D1 alloy (3.8% Cu; 0.8% Mn), 15-mm diam, 20-mm high, were quenched in water at 505-510°. Some of the specimens were aged naturally, others were artificially (high-T) aged at 150° for 30 min and then aged naturally; some specimens, freshly quenched, were exposed to a HSUS field for 5 min, with subsequent natural aging. The HSUS field was produced by electrical discharges from a condenser; discharge voltage 30-70 kv, condenser capacitance 0.02-0.24 μ f, HSUS frequency 200-600 kcps. Typical effect of HSUS field on hardness: Freshly quenched specimens with a hardness H_{RB} 47 acquired H_{RB} 62 in 5 min exposure to the HSUS field; a like increase in H_{RB} would have required 30 min of artificial aging and 6-7 hrs of natural aging. Upon completion of HSUS treatment, H_{RB} was 80, whereas specimens artificially aged for 30 min, with subsequent natural aging, did not exceed H_{RB} 70. Test results are graphed. The effect of the duration of the HSUS exposure upon the subsequent natural aging is graphically shown. X-ray-diffraction photos show the accelerated appearance of the $CuAl_2$ line after HSUS treatment. HSUS-stimulated recrystallization experiments with A18 alloy (3.6% Mg) are described. Initial upsetting deformation was varied from 1 to 42%. Some of the specimens were

Card 2/3

Effect of hydraulic shocks and of ultrasonic- ...

S/810/62/000/000/008/013

heated at various T for 50 min, and the RI T was determined by X-ray diffraction. The lowest RI T (350°C) corresponds to a deformation of 42%, whereas with treatment in a HSUS field, intensive grain growth was observed at 80°. The grain-growth rate, also, was sharply enhanced by the HSUS field. There are 7 figures and 6 Russian-language Soviet references.

ASSOCIATION: Novocherkasskiy politekhnicheskiy institut (Novocherkassk Politechnical Institute).

Card 3/3